

## *Impact Evaluation on Endangered and Threatened Species*

**The purpose of the study is to determine if changes in TVA's reservoir system operating policies would produce greater overall public value.**

### **Background**

TVA is conducting a formal evaluation of its policies for operating the Tennessee River reservoir system, including an analysis of the economic impacts of any potential changes in these policies. Existing policies affect how reservoir levels fluctuate, when changes in reservoir levels occur, and the amount of water flowing through the reservoir system at different times of the year, depending on rainfall.

The purpose of the study is to determine if changes in TVA's reservoir system operating policies would produce greater overall public value. Technical analyses will be performed to evaluate the impacts of TVA's current policies and the potential impacts of alternatives on a number of resource areas and other issues.

The two-year Reservoir Operations Study (ROS) is scheduled for completion in October 2003.

The impacts on federal endangered and threatened species, along with endangered or rare species protected in each state, will be evaluated as part of the ROS. The results of this evaluation will be documented in an environmental impact statement (EIS). TVA will conduct the study in accordance with National Environmental Policy Act (NEPA) requirements.

### **Potential Impacts**

- About 1,000 animal and plant species that occur in the counties involved in this study are identified as "protected" in one or more of the Valley states. Of these species, more than 80 animals and plants are on the federal lists of endangered or threatened species established by the Endangered Species Act. These federal- and state-listed species include a wide variety of animals and plants, from the gray bat and snail darter to Anthony's river snail and Ruth's golden aster.
- Some of the protected species that occur in the Tennessee Valley live away from the rivers and would not be affected by changes in reservoir operations. Many other protected species, however, either live in the rivers or depend upon them so much that they could be affected by some changes in reservoir operations.

### **Geographic Areas**

- For most protected species, the geographical area included in this part of the evaluation will include all of the Tennessee River system upstream to one mile above TVA's reservoir and tailwater areas.
- For migratory bird and mammal species, however, the geographical area included in the scope of this assessment will be defined on a species-by-species basis.

### **Scope of Analysis**

- TVA will look at the ways each alternative would change flows, water temperature, dissolved oxygen levels, and other habitat characteristics—and the consequences these changes would have on the endangered or threatened species that occur there.
- The potential impacts on protected species will be assessed on a waterbody-by-waterbody basis, using existing information about habitat requirements of the species that are present and results from the water quality, aquatic life, and other evaluations included in the ROS.
- The TVA Natural Heritage database includes most of the data to be used in this part of the evaluation. Additional data will be obtained from the various state Heritage projects and recent field studies.
- Information about the existing status of each federal protected species and the effects of the alternatives will be presented in a biological assessment. This assessment will be used during an Endangered Species Act consultation with the U.S. Fish and Wildlife Service and in the preparation of parts of the EIS. Information about state-protected species will be included in the EIS, but not in the biological assessment.

### **For More Information**

To submit comments or get additional information, members of the public are invited to visit TVA's Web site at [www.tva.com](http://www.tva.com), to call toll-free 888-882-7675, to fax TVA at 865-632-3146, or to write to ROS Project Manager David Nye, Tennessee Valley Authority, c/o WT 11A, 400 West Summit Hill Dr., Knoxville, TN 37902.